CLAIMS

1. (currently amended) A method comprising:
   filtering a far end signal to produce an estimate of an echo in a near end signal;
   subtracting the estimate from the near end signal to produce an error signal;
   calculating an echo return loss enhancement using the error signal;
   calculating an attenuation factor using the echo return loss enhancement; and
   attenuating a first signal based upon the attenuation factor, wherein the first signal includes a component of the near end signal, wherein:
   the calculating the attenuation factor using the echo return loss enhancement further includes calculating an echo return loss enhancement ceiling value, wherein the echo return loss enhancement ceiling value is calculated from a previous maximum calculated echo return loss enhancement; and
   the calculating the attenuation factor using the echo return loss enhancement further includes dividing the echo return loss enhancement by the ceiling value.

2. (currently amended) The method of claim 2 further comprising
   filtering the far end signal to produce a second estimate of an echo in the near end signal; and
   subtracting the second estimate from the near end signal to produce the first signal.

3. (original) The method of claim 1 wherein the first signal is formed from subtracting an estimate of an echo of the far end signal from the near end signal.

4. (original) The method of claim 1 wherein the filtering is characterized as adaptive filtering.

5. (canceled)

6. (currently amended) The method of claim ~~5~~ 1 wherein:

the echo return loss enhancement is calculated in the logarithmic domain[[;]]
~~the calculating the attenuation factor using the echo return loss enhancement further includes dividing the echo return loss enhancement by the ceiling value~~.

7. (currently amended) ~~The~~ A method ~~of claim 1~~ comprising:
filtering a far end signal to produce an estimate of an echo in a near end signal;
subtracting the estimate from the near end signal to produce an error signal;
calculating an echo return loss enhancement using the error signal;
calculating an attenuation factor using the echo return loss enhancement; and
attenuating a first signal based upon the attenuation factor, wherein the first signal includes a component of the near end signal, wherein:
the calculating the attenuation factor using the echo return loss enhancement further includes calculating a noise floor value; and
the calculating the attenuation factor using the echo return loss enhancement further includes multiplying the echo return loss enhancement by the noise floor.

8. (currently amended) The method of claim 7 wherein
the echo return loss enhancement is calculated in the logarithmic domain[[;]]
~~the calculating the attenuation factor using the echo return loss enhancement further includes multiplying the echo return loss enhancement by the noise floor~~.

9. (original) The method of claim 1 wherein the calculating the attenuation factor using the echo return loss enhancement further includes:
adjusting the echo return loss enhancement by an environmental attenuation factor.

10. (original) The method of claim 1 further comprising:
adding a comfort noise signal to the first signal based upon the attenuation factor.

11. (original) The method of claim 10 wherein the attenuating a first signal based upon the attenuation factor and the adding a comfort noise signal to the first signal based upon the attenuation factor are performed to produce a second signal according to the following:

$S = M(a) + N(1-a)$;

wherein S is the second signal;

wherein M is one of the first signal or the comfort noise signal;

wherein N is the other of the of the first signal or the comfort noise signal; and

wherein a is the attenuation factor.

12. (original) The method of claim 1 wherein the near end signal represents audio sounds received from a microphone.

13. (original) The method of claim 1 wherein the greater the echo return loss enhancement, the greater the attenuation of the attenuating.

14. (original) The method of claim 1 wherein the attenuation factor is given by the following:

the attenuation factor = 10 ^(ERLE*c);

wherein ERLE is the echo return loss enhancement and c is one of a constant or a variable;

wherein ERLE is calculated in the logarithmic domain.

15. (original) The method of claim 14 wherein the attenuation factor ranges between 0 and 1.

16. (original) The method claim 1 wherein the filtering, the subtracting, the calculating, the calculating the attenuation factor, and the attenuating are performed by a processor.

17. (original) A computer readable medium storing code whose execution performs the method of claim 1.

18. (original) The method of claim 1 wherein the first signal is attenuated by no amount to a relatively a low amount during a double talk condition.

19. (currently amended) An echo cancellation system comprising:

an echo canceller, the echo canceller provides an error signal from a near end signal and a far end signal;

an attenuator, the attenuator attenuates a first signal based upon an attenuation factor, wherein the first signal includes a component of the near end signal; and

an attenuation factor calculator, the attenuation factor calculator calculates an echo return loss enhancement using the error signal, ~~and~~ calculates the attenuation factor using the echo return loss enhancement, calculates an echo return loss enhancement ceiling value from a previous maximum calculated echo return loss enhancement, and calculates the attenuation factor by dividing the echo return loss enhancement by the ceiling value.

20. (original) The echo cancellation system of claim 19 further comprising:

a second echo canceller, the second echo canceller providing the first signal from the near end signal and the far end signal.

21. (original) The echo cancellation system of claim 19 wherein the echo canceller is characterized as an adaptive filter.

22. (original) The echo cancellation system of claim 19 wherein the echo canceller is characterized as a linear echo canceller.

23. (canceled)

24. (original) The echo cancellation system of claim 19 wherein the attenuation factor calculator calculates a noise floor value, the attenuation factor is calculated the noise floor value.

25. (original) The echo cancellation system of claim 19 wherein the attenuation factor is calculated using an environmental attenuation factor.

26. (original) The echo cancellation system of 19 further comprising:

a comfort noise generator, the comfort noise generator provides a provides a comfort noise signal;

a comfort noise attenuator, the comfort noise attenuator attenuates the comfort noise signal based upon the attenuation factor;

a summer, the summer combines the comfort noise signal attenuated by the comfort noise generator and the first signal attenuated by the attenuator to produce a combined signal.

27. (original) The echo cancellation system of claim 26 wherein the summed signal is produce according to the following:

$S = M(a) + N(1\text{-}a)$;

wherein S is the combined signal;

wherein M is one of the first signal or the comfort noise signal;

wherein N is the other of the of the first signal or the comfort noise signal; and

wherein a is the attenuation factor.

28. (original) The echo cancellation system of claim 19 wherein the attenuation factor is given by the following:

attenuation factor = 10 ^(ERLE*c);

wherein ERLE is the echo return loss enhancement and c is one of a constant or a variable;

wherein ERLE is calculated in the logarithmic domain.

29. (currently amended) The ~~method~~ echo cancellation system of claim 19 wherein the greater the echo return loss enhancement, the greater the attenuation by the attenuator.

30. (original) A communication device including the echo cancellation system of claim 19.

31. (original) The communication device of claim 30 wherein the echo cancellation system of claim 19 is utilized in a two way communication path for providing at least voice information.

32. (original) The communication device of claim 31 wherein the communication path includes a wireless communication path with a cellular phone.

33. (original) The communication device of claim 31 wherein the communication device is characterized as providing hands free communication to a near end user.

34. (currently amended) The communication device of claim 30 wherein the echo ~~canceller~~ cancellation system is implemented in an automobile sound system.

35. (currently amended) The echo cancellation system of claim ~~1~~ 19 wherein the echo canceller, the attenuator, and the an attenuation factor calculator are implemented by a processor executing code.

36. (canceled)

37. (original) The echo cancellation system of claim 19 wherein the echo canceller is an acoustic echo canceller.

38. (original) The echo cancellation system of claim 19 wherein the echo cancellation system is utilized in a communications device for implementing full duplex communication.

39. (currently amended) An echo cancellation system comprising:

an echo canceller, the echo canceller provides an error signal from a near end signal and a far end signal;

an attenuator, the attenuator attenuates a first signal based upon an attenuation factor, wherein the first signal includes a component of the near end signal

means for providing the attenuation factor calculated using an echo return loss enhancement, the echo return loss enhancement is calculated using the error signal and includes calculating a noise floor value and multiplying the echo return loss enhancement by the noise floor value.